

Application No. : 09/898,990  
Filed: : July 3, 2001

### REMARKS

Claims 22-25 were pending. By way of the present amendment, the Applicants changed the title, amended the specification, amended Claims 22-25 and added new Claims 26-40 to more fully define the Applicants invention. Claims 22-40 are pending for consideration and examination of the same is respectfully requested.

In addition, please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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**Version With Markings to Show Changes Made**

Insertions appear as underlined text, for example, insertions, while deletions appear as strikethrough text, for example, ~~deletions~~.

**IN THE SPECIFICATION:**

This application is a continuation of Application Serial No. 09/094,202, filed June 9, 1998, now U.S. Patent No. 6,256,523, which is a continuation of Application Serial No. 08/543,789, now U.S. Patent No. 5,782,757, filed October 16, 1995, which is a continuation-in-part of Application Serial No. 08/333,132, filed November 1, 1994, now U.S. Patent No. 5,638,818, which is a continuation-in-part of Application Serial No. 07/672,890, filed March 21, 1991, now abandoned.

**IN THE CLAIMS:**

22. (Amended) A disposable ~~An~~ optical probe for use with a physiological measurement device, said optical probe comprising:

at least one light emitter adapted to transmit optical radiation into a first side of a medium;

a detector adapted to receive an attenuated portion of the optical radiation after being transmitted through the medium to a second side;

a disposable substrate carrying the at least one emitter and detector; and  
an optical obstruction between the at least one emitter and said detector which reduces ~~light piping~~ of the optical radiation between said at least one emitter and said detector without transmission through the medium, when said optical probe is affixed to a portion of a patient.

23. (Amended) The disposable optical probe of Claim 22, wherein said optical obstruction comprises an aperture in said disposable substrate between the at least one emitter and the detector~~further comprising a flexible backing supporting said~~

~~flexible circuit, said flexible backing adapted to affixed said optical probe to said medium.~~

24. (Amended) A disposable ~~An~~ optical sensor for use in physiological monitoring comprising;

at least one emitter which emits light;

a detector which receives the light after non-reflective transmission through tissue of a patient;

a disposable substrate which positionscarrying said emitter and said detector proximate to said tissue; and

an optical barrier between the at least one emitter and the detector to substantially obstruct the emitted light ~~radiation~~ from transmitting along the disposable substrate between said at least one emitter and said detector without having passed through the tissue ~~a portion of the patient~~ when said disposable optical sensor is affixed to a patient.

25. (Amended) The disposable optical sensor of Claim 24, wherein said optical barrier ~~obstruction~~ comprises an aperture in said disposable substrate between the at least one emitter and the detector.